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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/865,733      | 05/29/2001  | Nadine Assaf         | Q64393              | 5965             |

23373 7590 12/27/2005  
SUGHRUE MION, PLLC  
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WASHINGTON, DC 20037

EXAMINER

PHILIPPE, GIMS S

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2613

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/865,733 | <b>Applicant(s)</b><br>ASSAF, NADINE |  |
|                              | <b>Examiner</b><br>Gims S. Philippe  | <b>Art Unit</b><br>2613              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. Applicant's amendment received on October 13, 2005 has been fully considered and entered, but the arguments are not deemed to be persuasive.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US Patent no. 5838829) in view of Khansari et al. (US Patent no. 6141448) for the same reasons as previously set forth in the last office action mailed on July 13<sup>th</sup> 2005.

Regarding the above claims, the applicant argues that "Kim is not predicting the motion of the contour within any particular part of the image, so there are no boundaries or edges in Kim". The examiner respectfully disagrees since in col. 3, lines 54-67, Kim clearly teaches a predicted contour wherein the predicted contour meets the boundary 10A.

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The applicant argues that Kim does not divide the macroblock into segments. The examiner respectfully disagrees since in col. 3, lines 28-33, Kim discloses an extended shifted on a pixel-by-pixel basis within the search range of  $\pm 16$  pixels along the vertical and horizontal directions. The  $\pm 16$  pixels forms the argued macroblock. In addition, MC and ME are performed after the picture is divided into macroblocks. In addition, the contour and boundaries as disclosed in Kim are considered to be identical to the applicant's claimed edge block.

The applicant argues that there no motion estimation vectors extending from an edge block of a segment into an adjacent segment. In response to the preceding argument, the examiner did acknowledge that such a feature was lacking in Kim and introduced Khansari col. 4, lines 34-55 to show how such feature is rather obvious to one skilled in the art at the time of the invention. Particularly, in col. 4, lines 49-52 Kim disclose motion vector extension.

The applicant further argues that there is nothing in either reference which could have led the ordinary skilled artisan to vary from the consistent teaching of the prior art whereby motion vector estimation is performed only within each slice but the analysis does not cross slice boundaries. The examiner respectfully disagrees since Khansari clearly suggest motion vector extension in col. 4, lines 34-55 while Kim discloses a predicted contour meeting an outer boundary 10A. in col. 3, lines 54-59.

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Kim col. 1, lines 20-33 and col. 4, lines 35-55 discloses operating with the low-bit and approximately the same error rate.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US Patent no. 5838829) in view of Khansari et al. (US Patent no. 6141448) as applied to claim 1 above, and further in view of Hannasukela et al. (US Patent no. 6611561) for the same reasons as previously set forth in the last office action mailed on July 13<sup>th</sup> 2005.

The applicant argues that Hannuksela does not provide the lacking teachings or the cited reference discussed above. The examiner respectfully disagrees since it is the examiner's belief that Kim and Khansari do meet the limitations of the above claims. However, Hannuksela col. 3, lines 3-15 was introduced to show the transmission wherein the error rate is greater than  $10^{-6}$  or even greater than  $10^{-4}$ .

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

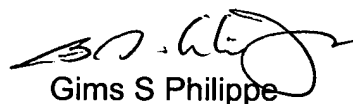
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dastouri S. Mehrdad can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gims S Philippe  
Primary Examiner  
Art Unit 2613

GSP

December 21, 2005